

Serial No. 10/621,463

Docket No. P-0563

Amendment dated February 22, 2007

Reply to Office Action of November 28, 2006

REMARKS

By the present response, Applicant has amended claims 2, 4, 5-7, 17, 18, 20 and 21 to further clarify the invention. Claims 1-28 are pending in this application. Reconsideration and withdrawal of the outstanding rejections and allowance of the present application re respectfully requested in view of the above amendments and following remarks.

In the Office Action, claims 1-5, 15-18 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicant's admitted prior art (APA). Claims 6-14 and 19-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA in view of U.S. Patent Application Publication No. 2004/0013169 (Kanemoto et al.).

35 U.S.C. § 103 Rejections

Claims 1-5, 15-18 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA. Applicant respectfully traverses these rejections.

Regarding claims 1 and 15, Applicant submits that the APA does not disclose or suggest the limitations in the combination of each of these claims. For example, the Examiner appears to assert that the APA discloses comparing a synchronization detection threshold value set for each section of a time period in which a quality of pilot is measured and a pilot bit error rate calculated for each section, in the APA at paragraph 3, lines 3-14 and paragraph 5, lines 5 and 6. However, these portions merely disclose that the dedicated physical control channel (DPCCH) includes a pilot field for a pilot pattern, and if a DPCCH quality for a certain time period (N

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frames) or a receiving signal to interference ratio (SIR) is greater than the synchronization threshold value, it is judged to be in synchronization status. This is not comparing a synchronization detection threshold value and a pilot bit error rate calculated for each section, as recited in the claims of the present application. The APA discloses determining if a DPCCH quality for N frames is greater than a synchronization threshold value. The APA does not disclose or suggest calculating a pilot bit error rate for each section, as recited in the claims of the present application. Further, as clearly disclosed in the APA, the DPCCH quality is determined for a certain time period that comprises N frames. As further detailed in paragraph 6, when the DPCCH quality is measured for judging an uplink synchronization, at least N frames are taken for detecting synchronization. This is not comparing the synchronization detection threshold value set for each section of a time period in which a quality of a pilot is measured, as recited in the claims of the present application.

The Examiner further asserts that the APA discloses a bit error rate calculated for each section, in paragraph 8, line 4, the Examiner asserting that the “block error rate” corresponds to “bit error rate.” However, this is an incorrect assertion. Clearly, it is well understood that a block is not the same as a bit. A block may comprise several bytes of data where each byte contains several bits. In *Newton's Telecom Dictionary*, 18th edition, a block is defined as “a group of bits transmitted as a unit and treated as a unit of information.” Further, paragraph 8 in the APA is related to uplink synchronization detection performed on the basis of the CRC of the uplink.

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receiving data whereas in contrast, paragraphs 3 and 5 referred to previously by the Examiner relate to synchronization detection performed on the basis of the quality of the uplink DPCCH. Therefore, this is an invalid combination in that these paragraphs relate to different types of detection.

Regarding claims 2-5, 16-18 and 28, Applicant submits that these claims are dependent on one of independent claims 1 and 15 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. Further, Applicant submits that the APA does not disclose or suggest these limitations in the claims of the present application. The Examiner makes an improper rejection in that the Examiner fails to specifically point where in the APA each and every limitation of these claims is alleged to be disclosed or suggested. Further, the Examiner states that since “if” is used in the dependent claims, the Examiner need not consider these claims. Applicant respectfully submits that this is incorrect and respectfully requests the Examiner to provide either supporting case law or MPEP sections to justify this assertion. To further prosecution of the present application, Applicant has amended these claims to further clarify the invention. Applicant respectfully requests that the Examiner consider and examine these claims in any future Office Action.

Accordingly, Applicant submits that the APA does not disclose suggest or render obvious the limitations in the combination of each of claims 1-5, 15-18 and 28 of the present application.

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Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

Claims 6-14 and 19-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA in view of Kanemoto et al. Applicant respectfully traverses these rejections.

Kanemoto et al. discloses a quadrantal compensation circuit performs quadrantal compensation on a despread signal. A between-symbol averaging circuit averages in-phase addition results over a period in which differential detection is performed. A differential detection circuit performs differential detection using averaged in-phase addition results. A between-finger averaging circuit averages differential detection output averaged between fingers. A normalization circuit normalizes differential detection output averaged between fingers. A multiplier multiplies differential detection output from the differential detection circuit by the complex conjugate of normalized differential detection output. An absolute value calculation circuit performs absolute value calculation for differential detection output after it has undergone frequency offset compensation. A between-finger averaging circuit averages differential detection output averaged between fingers.

Regarding claim 6, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of this claim. For example, none of the cited references disclose or suggest calculating a pilot bit error of an uplink allocated to a finger for a first section, as recited in the claims of the present

application. The Examiner provides no portions of any asserted art that discloses or suggests these limitations.

Moreover, the Examiner appears to assert that the APA discloses comparing the first pilot BER calculated for the first section with a first synchronization detection threshold value set for the first section, in paragraphs 2 and 5. However, as noted previously, the APA does not disclose or suggest these limitations in the claims of the present application. A signal to interference ratio (SIR) is not a pilot BER, as recited in the claims of the present application. The APA does not disclose or suggest comparing the first pilot BER (or a first SIR) calculated for the first section with a first synchronization detection threshold value set for the first section, as recited in the claims of the present application.

The Examiner admits that the APA does not disclose or suggest a pilot bit error rate being compared to a synchronization threshold value, but asserts that Kanemoto et al. discloses these limitations in paragraph 196, lines 1-3. However, this is not comparing the first pilot BER calculated for the first section with a first synchronization detection threshold value set for the first section, as recited in the claims of the present application. Neither the APA nor Kanemoto et al. disclose or suggest calculating a BER for a first section and comparing the BER for the first section with a threshold for the first section.

In addition, the Examiner again ignores limitations in the claims of the present application asserting the use of “if” is an option and no need for consideration. Applicant

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respectfully requests the Examiner to provide justification for these assertions. However, Applicant has amended the claims to further clarify the invention eliminating the word "if" and, therefore, respectfully request the Examiner to consider and examine all limitations and all claims of the present application.

Moreover, Applicant submits that there would be no motivation for one or ordinary skill in the art to combine the APA with Kanemoto et al. For valid combination, there must be some teaching or suggestion in the cited reference for the combination. Applicant submits there is no teaching or suggestion in Kanemoto et al. to be combined with the APA. Further, in contrast to the Examiner's assertion, there is no teaching or suggestion to provide BER measurement related to signal strength rather than based on SIR.

Regarding claims 7-14 and 9-27, Applicant submits that these claims are dependent on one of independent claims 6 and 15 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 6-14 and 19-27 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

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CONCLUSION

In view of the foregoing amendment and remarks, Applicant submits that claims 1-28 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,

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